```
gcd_p_neg_arg  THM

⊢  ∀a,b,y:ℤ. GCD(a;b;y) ⇒ GCD(a;-b;y)  by Unfold ‘gcd_p‘ 0
|
|\
| 1. a : ℤ
| 2. b : ℤ
| 3. y : ℤ
| 4. y | a
| 5. y | b
| 6. ∀z:ℤ. z | a & z | b ⇒ z | y
| ⊢  y | -b
|   by BackThru Thm* ∀a,b:ℤ. a | b ⟺ a | -b    {divides_invar_2}
|
.\
. 1. a : ℤ
. 2. b : ℤ
. 3. y : ℤ
. 4. y | a
. 5. y | b
. 6. ∀z:ℤ. z | a & z | b ⇒ z | y
. 7. z : ℤ
. 8. z | a
. 9. z | -b
. ⊢  z | y  by (BackThru 6) THEN (Analyze 0)
. |
. ⊢  z | b
.   by FwdThruGenLemma
.      Thm* ∀a,b:ℤ. a | b ⟺ a | -b    {divides_invar_2}
.      2
.      [9]
END
```